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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,478	04/09/2004	Hiroyasu Tsuchida	16869Q106600US	1064

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EXAMINER

TUPPER, ROBERT S

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/821,478	TSUCHIDA ET AL.	
	Examiner	Art Unit	
	Robert S. Tupper	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-19 and 23-28 is/are allowed.
- 6) ☒ Claim(s) 20-22 and 29-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2627

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 20-22 and 29-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

This application discloses a suspension assembly with a flexure having two supporting areas attached at spaced locations to the load beam, and further including two loop spring structures, each having made up of two arm portions, that support the flexure tongue.

It is unclear what exact structural elements of the disclosed assembly are being claimed in these claims since the claims do not specify first or second supporting areas, or first or second loop spring structures.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 20-22, 29, and 31 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by KHAN (5,568,332).

Note figures 1, 2, and 4-7. KHAN shows a disk drive (with a disk, head, slider, and rotary actuator - see column 1 lines 26-36) with a head/slider suspension including a load beam (10) and a flexure (12) having support areas (not numbered - each end of the flexure), a tongue (40) with a dimple contact point (50) and supporting structures (48, 52, and the unnumbered cross piece from which the tongue projects).

5. Claims 20-22 and 29 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by IKEDA et al (6,549,374).

Note figures 1 and 7-15. IKEDA et al shows a disk drive (with a disk, head, slider, and actuator - see figure 1) with a head/slider suspension including a load beam (36) and a flexure (40) having support areas (42Aa,42B), a tongue (41) with a dimple contact point (44) and supporting structures (45A-D, 47A, 47B).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over KHAN (5,568,332).

KHAN shows a disk drive head/slider suspension with flexure substantially as claimed.

KHAN differs in not showing an unload ramp.

The Examiner takes Official Notice that head parking using an unload ramp is well known and common. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an unload ramp in the disk drive of KHAN. The motivation is as follows: as noted above this is commonly used to protect heads.

8. Claims 20-22 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over GIRARD (6,741,426).

Note figures 1, 3-5, and 8-11). GIRARD shows a disk drive (with a disk, head, slider, and rotary actuator - see figure 1) with a head/slider suspension including a load beam (46) and a flexure (45) having support areas (not numbered - each end of the flexure), a tongue (60) and supporting structures (62, 76).

GIRARD differs in not showing: (A) a dimple contact point (re claims 20 and 29), and (B) an unload ramp (re claim 30).

Concerning (A), the Examiner takes Official Notice that utilizing a dimple contact point between the flexure and load beam is well known and common. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a dimple contact point between the flexure and load beam in the disk drive of KHAN. The motivation is as follows: as noted above this is commonly used to provide for movement of the slider.

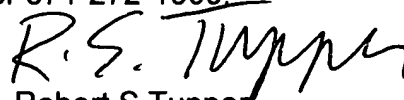
Concerning (B), . The Examiner takes Official Notice that head parking using an unload ramp is well known and common. It would have been obvious to one of ordinary

skill in the art at the time the invention was made to provide an unload ramp in the disk drive of KHAN. The motivation is as follows: as noted above this is commonly used to protect heads.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert S. Tupper whose telephone number is 571-272-7581. The examiner can normally be reached on Mon - Fri, 6:30 AM - 4:00 PM (first Fri off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Robert S Tupper
Primary Examiner
Art Unit 2627